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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/597,310	07/20/2006	Johannes Maria Van Meurs	NL040055	9206
	7590 09/01/200 LLECTUAL PROPER	EXAMINER		
P.O. BOX 3001		A, MINH D		
BRIARCLIFF MANOR, NY 10510			ART UNIT	PAPER NUMBER
			2821	
			MAIL DATE	DELIVERY MODE
			09/01/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Astion Comments		Application	on No.	Applicant(s)				
		10/597,3	0	VAN MEURS ET AL.				
	Office Action Summary	Examiner		Art Unit				
		MINH D. A	1	2821				
Period fo	The MAILING DATE of this communication a or Reply	appears on the	cover sheet with the c	orrespondence a	ddress			
WHIC - Exter after - If NO - Failu Any r	ORTENED STATUTORY PERIOD FOR REF CHEVER IS LONGER, FROM THE MAILING asions of time may be available under the provisions of 37 CFR SIX (6) MONTHS from the mailing date of this communication. The period for reply is specified above, the maximum statutory period re to reply within the set or extended period for reply will, by state eply received by the Office later than three months after the mailed patent term adjustment. See 37 CFR 1.704(b).	DATE OF TH 1.136(a). In no evo od will apply and wi tute, cause the app	IIS COMMUNICATION ent, however, may a reply be tin II expire SIX (6) MONTHS from lication to become ABANDONE	N. nely filed the mailing date of this D (35 U.S.C. § 133).				
Status								
1)[\]	Responsive to communication(s) filed on 06	Δυσμετ 2000						
•	Responsive to communication(s) filed on <u>06 August 2009</u> .  This action is <b>FINAL</b> .  2b) This action is non-final.							
′=	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is							
٥,١	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
Dispositi	on of Claims							
4)⊠	Claim(s) 1-20 is/are pending in the application	on.						
	4a) Of the above claim(s) is/are withdrawn from consideration.							
	☐ Claim(s) is/are allowed.							
·	S)⊠ Claim(s) <u>——</u> is/are allowed. S)⊠ Claim(s) <u>1-20</u> is/are rejected.							
· ·	Claim(s) is/are objected to.							
•	Claim(s) are subject to restriction and	d/or election re	equirement.					
Applicati	on Papers							
	The specification is objected to by the Exami	iner						
-			Objected to by the F	Examiner.				
. • / 🗀	10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.05(a).								
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.								
Priority u	ınder 35 U.S.C. § 119							
· .	12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:  1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No							
<ul> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>								
2)  Notic 3) Inforr	t(s) e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO/SB/08) r No(s)/Mail Date		4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	ate				

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#### **DETAILED ACTION**

This Office Action is a response to Applicant's amendment after final filed on August 6 2009. In virtue of this amendment, claims 1-20 are currently presented in the instant application.

# Response to Arguments

1. Applicant's arguments, see REAMRK, filed 8/6/09, with respect to the rejection(s) of claim(s) 1-20 under 102 and 103 have been fully considered and are persuasive.

Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Sun(U.S Patent No: 6, 144, 172).

### Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mita (Pub. No.: US 2003/0222594) in view of Sun (U.S Patent No: 6,144,172).

Regarding claim 1, Mita discloses, in figures 1 and 3 at the right that, a high frequency driver for a gas discharge lamp that includes a capacitor in parallel to the lamp\_and an inductor that is in series with the parallel connection of the lamp and capacitor, comprising an oscillator, that includes DC input terminals for connecting to a DC source and AC output terminals for connecting to a load comprising the lamp(12), the inductor(L1) and the capacitor(C1), the oscillator(see inverter control circuit (21) is

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coupled to Oscillation halting circuit (29))
providing a lamp voltage at a first high oscillating
frequency (fo1))during ignition of the lamp(12)
and at a second high oscillating frequency(f01)
during normal operation of the lamp(12) after its
ignition. Page 4, paragraph [0049] to paragraph
[0054] and page 5, paragraph [0057], lines 1-15.

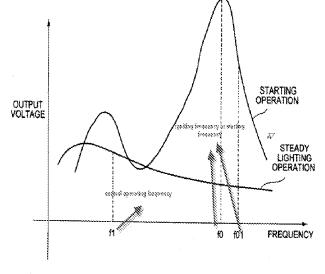


FIG. 3

Mita does not clearly disclose that, wherein at least one of the first and second oscillating frequencies (f01, f0) is frequency modulated.

### Sun disclose in figure

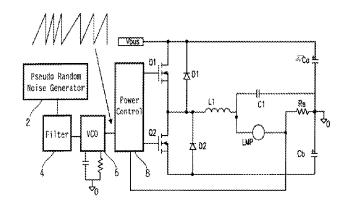


FIG. 1

Sun disclose, in figure 1 above that, the (noise generator) (2) and VCO(6) connected to the power control for modulating higher frequency. Col.6, lines 44-47 and col.8, lines 19-27.

It would have been obvious to one having ordinary skill in the art to the noise generator and VCO as suggested by Sun into the apparatus of discharge lamp of Mita

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to achieve the claimed invention. As disclosed in the arrangement circuit of Sun, the motivation for the combination would be to reduce an acoustic resonance due to high frequency operation.

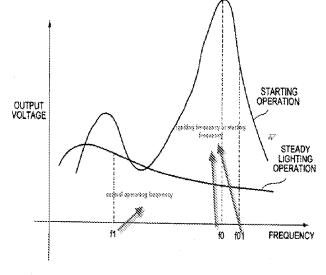


FIG. 3

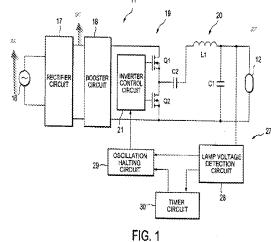
Regarding claim 6 and 12, combination

Mita and Sun disclose wherein the modulating frequency being derived from an AC

supply (AC source) to the DC source (DC source). See

figure 1 above of Mita.

Regarding claim 7, Mita discloses, in figures 1 and 3 above, a method for driving a gas discharge via an oscillator, that includes DC input terminals for connecting to a DC source and AC output terminals for connecting to a load comprising the lamp(12), the inductor(L1) and the



capacitor(C1), the oscillator(see inverter control circuit (21) is coupled to Oscillation halting circuit (29)) providing a lamp voltage at a first high oscillating frequency

(fo1))during ignition of the lamp(12) and at a second high oscillating frequency(f01) during normal operation of the lamp(12) after its ignition.

Page 4, paragraph [0049] to paragraph [0054] and page 5, paragraph [0057], lines 1-15.

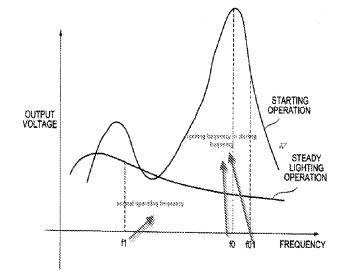


FIG. 3

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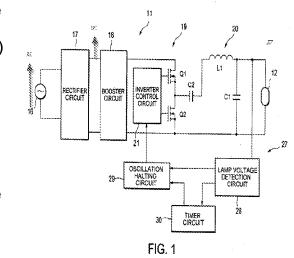
Sun disclose, in figure 1 above that, the (noise generator) (2) and VCO(6) connected to the power control for modulating higher frequency. Col.6, lines 44-47 and col.8, lines 19-27.

It would have been obvious to one having ordinary skill in the art to the noise generator and VCO as suggested by Sun into the apparatus of discharge lamp of Mita to achieve the claimed invention. As disclosed in the arrangement circuit of Sun, the motivation for the combination would be to reduce an acoustic resonance due to high frequency operation.

Regarding claim 13, Mita discloses, in figures 1 and 3 above that, a gas discharge lamp assembly comprising: a capacitor, a gas discharge lamp coupled in

parallel to the capacitor, an inductor that is in series with the lamp and capacitor, DC supply circuit(17) and driver(Q1,Q2) that includes an oscillator(inverter control circuit is coupled to the oscillation circuit as shown in figure 1 at the right) that includes DC input terminals coupled to the DC source and AC output terminals connected to a load comprising the lamp(12), the inductor(L1), and the capacitor(C1), the

oscillator(inverter control circuit and oscillation circuit)) providing a lamp voltage at a first high oscillating frequency(fo1) during ignition of the lamp and at a second high oscillating frequency (fo1)during normal operation of the lamp after its



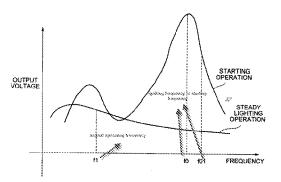


FIG. 3

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ignition. Page 4, paragraph [0049] to paragraph [0054] and page 5, paragraph [0057], lines 1-15.

Sun disclose, in figure 1 above that, the (noise generator) (2) and VCO(6) connected to the power control for modulating higher frequency. Col.6, lines 44-47 and col.8, lines 19-27.

It would have been obvious to one having ordinary skill in the art to the noise generator and VCO as suggested by Sun into the apparatus of discharge lamp of Mita to achieve the claimed invention. As disclosed in the arrangement circuit of Sun, the motivation for the combination would be to reduce an acoustic resonance due to high frequency operation.

Regarding claims 14, 17 and 19, combination Mita and Sun disclose wherein the first and second high oscillating frequencies are frequency modulated. See figure 3 of Mita.

Regarding claims 2-3, 8-9,15-16,18, and 20, combination Mita and Sun disclose all claimed invention as recited in claims 1, 7 and 13, except for except for the ratio of the first to second oscillating frequencies is in a range of 2.2 to 7 or the ratio is about approximately 5.

This is difference is not of patentable merit since, the difference of ratio is required the range of frequency between the first frequency and the second frequency and a result in the range of 2.2 to 7 or approximately 5 is subject to optimization.

Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to employ the first and second frequencies for the ratio for at least 2.2 to 7 or approximately 5, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art.

Regarding claims 4-5, 10-11, combination Mita and Sun disclose all of the claimed subject matter, as expressly recited in claim 1, except for wherein the oscillating frequency is frequency modulated with less than 15% of an average of the oscillating frequency or wherein the frequency modulation is about 7% of the average of the oscillating frequency.

However, providing the frequency modulated with less than 15% or 7% of an average of the oscillating frequency from the oscillating frequency is not of patentable merits since it is directed to a operation of frequency in the ballast which does not differentiate apparatus claim from the prior art. A claim containing a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus if the prior art apparatus teaches all the structural limitations of the claim. See MPEP § 2114.

#### Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

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mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

## Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh Dieu A whose telephone number is (571) 272-1817. The examiner can normally be reached on M-F (5:30 AM-2: 45 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Owens Douglas W can be reached on (571) 272-1662. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Examiner Minh A

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Date 8/31/09

/Douglas W Owens/ Supervisory Patent Examiner, Art Unit 2821 August 31, 2009